

# Estuaries

## Critical Coastal Louisiana Ecosystems

The Louisiana coast is like few other places in the world in terms of its abundance and diversity of plants and animals: from cypress swamps to oyster reefs, alligators to speckled trout. Most of these species depend on healthy estuaries—ecosystems formed by connections between the fresh water of rivers and streams and salty water of oceans. This mixing provides a range of fresh and salt conditions needed to support a diversity of habitats, and constantly changes depending on rainfall, river height, wind, tides, and other factors.

The amount of salt mixed into water is known as salinity, and is measured in parts per thousand (ppt). The habitats of Louisiana's estuaries exist along a constantly fluctuating range of salinities between 0 ppt near swamps and freshwater marshes, towards 10 ppt for brackish and intermediate habitats, up to 30 ppt and beyond for salt marsh and barrier islands.

Many species rely on a combination of habitats throughout their lifetime. Blue crabs are a good example of this broad usage. Adult male blue crabs move between the fresh, intermediate, and brackish habitats. Adult females predominantly mate with males in the brackish habitats and then move out to saltier habitats and off barrier islands to spawn. The newly hatched juveniles then travel back into the fresher habitats, beginning the cycle again.

Healthy estuaries are critical for the future of Louisiana's coast.

